2. (Amended) The optical interleaver of claim 1 wherein:

said phase delay difference generating means comprising a glass plate blocking a portion of said collimated parallel beams for generating a phase delay for a portion of said collimated parallel beams passing therethrough.

3. (Amended) The optical interleaver of claim 1 wherein:

said phase delay difference generating means comprising a glass plate having an upper portion covering an upper portion of said collimated parallel beams and said glass plate having a lower portion covering a lower portion of said collimated parallel beams for generating a phase delay difference between said upper portion and lower portion of said collimated parallel beams.

4. (Amended) The optical interleaver of claim 1 further comprising:

a control means for controlling said phase delay difference generating means for selectively generating signal transmission at different wavelengths according to said interference generated in said second collimating lens.

5. (Amended) The optical interleaver of claim 4 further comprising:

said phase delay difference generating means comprising a glass plate having a plurality predefined segments with different combination of plate-thickness and diffraction index wherein said phase delay difference generating means is controlled by said control means for selectively generating signal transmission at different wavelengths with a predefined program.

6. (Amended) The optical interleaver of claim 1 wherein:

said phase delay difference generating means comprising a set of cascaded Mach-Zanter interferometer for generating a series of band-pass signal transmissions.

7. (Amended) The optical interleaver of claim 6 wherein:

each of said a set of cascaded Mach-Zanter interferometer comprising a phase delay plate and a half-pitch GRIN lens.

8. (Amended) The optical interleaver of claim 6 wherein:

each of said a set of cascaded Mach-Zanter interferometer comprising a phase delay plate and a pair of focus and collimating lenses.

9. (Amended) The optical interleaver of claim 1 further comprising:

a reflective means for reflecting a portion of said collimated beams as second group of parallel beams transmitted along a second optical path away from said collimated parallel beams;

a third collimating lens for focusing said second group of parallel beams into a second output optical fiber; and

a second phase-delay difference generating means for generating a second phase-delay difference between portions of said second group of parallel beams for generating an interference in said third collimating lens for selectively enhancing signal transmission of a second set of wavelengths outputting from said second optical fiber.

10. (Amended) The optical interleaver of claim 9 wherein:

said reflective means comprising a partially reflective front surface of said phase delay means and a mirror for reflecting a portion of said collimated beams as second group of parallel beams transmitted along a second optical path away from said collimated parallel beams.

12. (Amended) The optical interleaver of claim 1 further comprising:

a control means for controlling said phase difference generating means controlling a selection of certain wavelengths for enhanced signal transmission.

13. (Amended) The optical interleaver of claim 1 wherein:

said phase difference generating means further comprising an optical element for transmitting optical beams therethrough.

14. (Amended) The optical interleaver of claim 13 wherein:

said phase difference generating means further comprising said optical element for transmitting optical beams therethrough with at least two portions of different thicknesses.

15. (Amended) The optical interleaver of claim 13 wherein:

said phase difference generating means further comprising said optical element for transmitting optical beams therethrough with at least two portions of different diffraction indexes.

16. (Amended) A method for configuring an optical interleaver comprising:

providing a first collimating lens for collimating an input optical signal into collimated beams and a second collimating lens for focusing said collimated parallel beams into an output optical fiber; and

employing a phase difference generating means for generating a phase difference between different portion of optical beams for generating an interference pattern that is substantially periodic and for selecting a plurality of single-wavelength signals in the optical beams.

17. (Amended) The method of claim 16 further comprising:

employing a control means for controlling said phase difference generating means controlling a selection of certain wavelengths for enhanced signal transmission.

18. (Amended) The method of claim 16 wherein:

said step of employing said phase difference generating means further comprising a step of employing an optical element for transmitting optical beams therethrough.

19. (Amended) The optical interleaver of claim 18 wherein:

said step of employing said optical element for transmitting said optical beams therethrough is a step of employing said optical element with at least two portions of different thicknesses for transmitting said beams through.